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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/502,810	02/11/2000	Jonathan S. Brecher	103544.127	5710

7590

11/05/2002

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EXAMINER

ALLEN, MARIANNE P

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 11/05/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/502,810

Applicant(s)

BRECHER, JONATHAN S.

Examiner

Marianne P. Allen

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 21-23 have been newly added. Claims 1-23 are under consideration by the examiner.

Applicant's arguments filed 8/19/02 have been fully considered but they are not persuasive.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Information Disclosure Statement***

Applicant is again encouraged to file an Information Disclosure Statement and is reminded of their duty to disclose information which is material to the patentability of the claims.

#### ***Specification***

Applicant's resubmission of a microfiche appendix of 382 frames on four sheets of microfiche is noted. However, the copy of the postcard submitted does not appear to have been stamped indicating receipt of these materials by the PTO. Clarification is requested.

Amendment of the specification to insert the appendix pages prior to the claims is noted.

#### ***Claim Rejections - 35 USC § 112***

Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

This rejection is maintained for reasons of record and as discussed below.

Applicant has added new claims 21-23. They have not pointed to basis for each limitation of each claim nor for the collective method and as such are new matter. No basis for the generic method, system, or computer software is apparent. Several of the prior new matter rejections also apply to these claims as they use the same language.

Applicant points to Figure 2 and pages 4-5 for support of the limitation "acquiring a chemical name lacking an association with a chemically accurate computer readable diagrammatic representation of a substance identified by the chemical name." These portions of the specification do not set forth this generic concept. The specification does not describe the claimed method in these terms. Note also that these disclosures are within the context of a particular method used by applicant and not the presently claimed generic method.

Applicant points to pages 24 and 28 for support of the limitation "applying computer executable logic to the first and second fragments." These portions of the specification do not set forth this generic concept. The specification does not describe the claimed method in these terms. Note that the disclosure on page 24 is not with respect to the first and second fragments but to a consolidated list within the context of a particular method used by applicant and not the presently claimed generic method. Note that the disclosure on page 28 is directed to the fact that it is a computer executed method and does not point to first and second fragments. Neither page discusses "computer executable logic."

Basis for the "acquiror" in the system of claim 3 is stated to be on page 4. Applicant asserts that this disclosure is an example of an acquiror. Applicant is reminded that a particular example does not provide support for a generic concept. The specification does not disclose nor

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contemplate the general concept of an acquiror nor does it set forth the metes and bounds of what this encompasses. Note that the claims would not be limited to the particular example set forth by applicant.

With respect to claims 5 and 16, applicant's argument is not persuasive. Pages 5 and 13 disclose particular text changes not the generic "making a change to the chemical name to facilitate subsequent analysis." Note that the claims are not limited to the changes on pages 5 and 13. The specification does not disclose nor contemplate the general concept of unspecified changes to facilitate analysis nor does it set forth the metes and bounds of what this encompasses.

With respect to claims 7 and 18, applicant's argument is not persuasive. Pages 6 and 13 disclose particular delimiters being inserted with respect to particular processing steps. The specification does not disclose nor contemplate the general concept of unspecified delimiters being inserted in chemical names for no particular reason. That is, the particular method inserts particular delimiters according to particular rules. The claims are not so limited.

Likewise with respect to claims 8-9, 14-15, and 19-20, the portions of the specification pointed to by applicant are in the context of a particular method and does not disclose the generic concept. The claims are not so limited.

Applicant has amended claims 1, 3, and 4 to recite "having had non-contiguous positions in the chemical name." Applicant points to page 21, 17, and 24 in support. None of these sections discuss first and second fragments having non-contiguous positions in the chemical name. It is unclear why applicant believes these portions of the specification support this claim

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language. In the example on page 24, the text string is manipulated to all lowercase letters, a typographical error in the text string is corrected, the name is uninverted producing a new text string, this text string is broken into six recognized fragments, and a list of six nomTokens is created. There is no discussion as to the position of any text in the original string.

With respect to applicant's arguments concerning the art rejection (where they assert that the chemical name is already associated with a structure and thus is not anticipated), how is one of ordinary skill in the art to know whether or not a chemical name lacks an association with a chemically accurate computer diagrammatic representation of a substance identified by a chemical name? Note that the examples in Figure 1 and 7A-G of the specification had known computer diagrammatic representations. If the claim language is intended to limit the chemical names that can be used as input for the claimed method, then the specification doesn't guide one to the chemical names that can or cannot be used in the method. It is further noted that the original claims did not have such a limitation. Applicant is requested to further point to basis in the specification for this limitation as well as to the guidance on knowing which chemical names to use in the method.

Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This is an enablement rejection.

This rejection is maintained for reasons of record.

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The claims in no way reflect the particular method for text processing and structure generation outlined in the specification and set forth in the microfiche.

Any reliance applicant is placing co-pending application 09/502,133 to enable the instant application is unfounded. At best this is an improper incorporation by reference as this co-pending application is neither allowed nor an issued patent.

As set forth in the prior Office action, the specification discloses a method of consolidating the resulting meaningful substrings according to a particular algorithm to build a chemically accurate computer readable diagrammatic representation of the final resulting structure using a connectivity table. This is not the method, system, or computer software being claimed.

All set forth in the prior Office action, all of the claims as written are lacking critical elements.

Again with respect to claims 5 and 16, "making a change...to facilitate subsequent analysis." The specification provides no general guidance on what changes would facilitate subsequent analysis.

Again with respect to claims 6 and 17, the claims do not provide the critical feature(s) that results in detection or identification that a text string is a chemical name in inverted form. Note that the specification requires particular text analysis of the context and environment.

Again with respect to claims 7 and 18, "inserting a delimiter" does not describe with particularity what is to be inserted, where it is to be inserted, and for what purpose it is to be inserted. (See new matter rejection.) The specification does not provide guidance for methods where an unspecified delimiter is randomly added to the chemical name.

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Again with respect to claims 11-13, the specification provides a specific example of a “locant map,” a “attach-in map,” and an “attach-out map.” There is no disclosure of the metes and bounds of all such data objects that are intended to be encompassed by these terms nor guidance on how to make or use them. The art of record and in the specification do not demonstrate that these are well known and routinely used maps in the area of chemical structural derivation.

Again with respect to claim 14, the specification does not provide guidance on different criteria for selecting the portion of the contents nor determining whether it is “representative of” the fragments. That is, one of skill in the art would not have any basis for knowing when this limitation had been met.



Again with respect to claims 8, 9, 19, and 20, the specification does not provide guidance on comparing the first or second fragment to unspecified chemical characteristics data. That is, there is no guidance on performing a method where the fragments are compared to or associated with molecular weight data or NMR spectroscopic data.

Claims 21-23 are not enabled for the same reasons. At the very least, the claims do not provide the processing rule to be used, do not provide the algorithmic steps to determine type and position information such that the structural representation can be determined. The specification provides only for particular processing rules and steps to determine type and position information to be used to generate structure.

*Applicant is advised that their response failed to address each of the particular points raised in the prior Office action. There was no explanation or argument why the specification enabled each aspect. Failure to address each of these points in the next response will be considered non-responsive.*

***Claim Rejections - 35 USC § 102***

Claims 1-5, 7-16, 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyer et al. (U.S. Patent No. 5,345,516).

This rejection is maintained for reasons of record.

When the chemical name is input into the method of Boyer et al. it is not associated with a structure. The method generates the structure. The parsing of Boyer et al. creates at least two text strings that are not required to be contiguous in the original text string. Furthermore, the

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strings can be further broken into additional strings where any particular pair might not have been contiguous. The processing decisions must be based at least in part on the position of the fragments to generate a structure consistent with the original name using a connectivity table. See at least Figure 12.

### ***Conclusion***

No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne P. Allen whose telephone number is 703-308-0666. The examiner can normally be reached on Monday-Friday, 7:00 am - 1:00 pm.

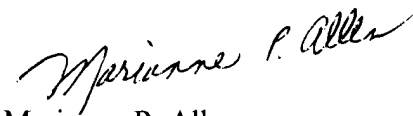
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 703-308-4028. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

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A handwritten signature in cursive script that reads "Marianne P. Allen".

Marianne P. Allen  
Primary Examiner  
Art Unit 1631

mpa

November 4, 2002